

I. AMENDMENTS TO THE SPECIFICATION:

Kindly amend the Substitute Specification filed on January 14, 2009 as follows:

1. Kindly replace Table 13 on page 69 with the following new Table 13 as follows:

[Table 13]

Copper Alloy	No. Type	Average Grain Diameter (μm)	Machinability				Tensile Strength (N/mm^2)	Yield Strength (N/mm^2)	Elongation (%)	Fatigue Strength (N/mm^2)
			Cutting type		Cutting main stress (N)					
			80m/ min	160m/ min	80m/ min	160m/ min				
	1 A	85								
	2 A	40								
	3 A	25	⊙	○			532	245	44	253
	4 A	15	⊙	○			535	268	45	258
	5 A	25	⊙	○			523	256	44	254
	6 A	30	⊙	○						
	7 A	55					492	219	42	
	8 A	90								
	9 A	40					498	236	30	
	10 A	25	⊙	○						
	11 A	20								
	12 A	65								
	13 A	80								
	14 A	45	○	△	122	133				
	15 A	65					485	206	39	
	16 A	70								
	17 A	30								
	18 A	20	⊙	○	115	127				
	19 A	20	⊙	○	111	118				
	20 A	20	⊙	○	110	118				
	21 A	20	⊙	⊙	110	117				
	22 A	20	⊙	⊙	109	116				
	23 A	20	⊙	⊙	108	114	530	266	43	254

2. Kindly replace Table 14 on page 70 with the following new Table 14 as follows:

[Table 14]

Copper Alloy	No. Type	Average Grain Diameter (μm)	Machinability				Tensile Strength (N/mm ²)	Yield Strength (N/mm ²)	Elongation (%)	Fatigue Strength (N/mm ²)
			Cutting type	80m/ min	160m/ min	Cutting main stress (N)				
				80m/ min	160m/ min	160m/ min				
	24 A	20	⊙	⊙	⊙	106	112			
	25 A	20	●	⊙	⊙	104	109	251	38	
	26 A	45	○	○	○	115	124			
	27 A	45	⊙	⊙	○	114	123			
	28 A	45	⊙	⊙	○	111	119			
	29 A	45	⊙	⊙	⊙	109	115			
	30 A	40	○	○	○	114	124			
	31 A	40	⊙	⊙	○	110	118			
	32 A	35	⊙	⊙	○	113	122			
	33 A	25	⊙	⊙	⊙	111	119			
	34 A	15								
	35 A	20	⊙	⊙	○	116	127	272	40	262
	36 A	20	⊙	⊙	○	117	129	260	34	
	37 A	20								
	38 A	25	○	○	△			443	256	13
	39 A	45						642	302	30
	40 A	30	○	○	△			554	256	33
	41 A	60								
	42 A	20								
	43 A	20	⊙	○	○	114	123	525	261	34
	44 A	20	⊙	⊙	⊙	111	116			252
	45 A	15								
	46 A	15						612	288	32

3. Kindly replace Table 15 on page 71 with the following new Table 15 as follows:

[Table 15]

Copper Alloy	No.	Type	Average Grain Diameter (μm)	Machinability				Tensile Strength (N/mm^2)	Yield Strength (N/mm^2)	Elongation (%)	Fatigue Strength (N/mm^2)
				Cutting type	Cutting main stress (N)	80m/ min	160m/ min				
Embodiment	47	B	15	⊙	⊙	115	128	720	640	17	336
	48	B	15	⊙	⊙	116	128	735	655	15	
	49	B	150					698	599	14	
	50	B	25	⊙	⊙	119	134	705	613	19	
	51	B	15	⊙	⊙	110	117	715	632	16	
	52	B	15	⊙	⊙	117	129	730	651	15	
	53	C	35					501	234	30	
	54	C	20					524	262	32	
	55	C	15					534	278	34	
	56	C	25					515	250	33	
	57	C	80					468	203	28	
	58	C	80					546	245	27	
	59	C	15					526	257	32	
	60	C	25					522	252	40	
	61	C	25								
	62	C	15					521	250	33	
	63	C	15								
	64	C	20					525	255	32	
	65	C	15								
	66	C	20								
	67	C	15								
	68	C	20					521	250	31	
	69	C	70								
	70	C	20								

4. Kindly replace Table 16 on page 72 with the following new Table 16 as follows:

[Table 16]

No.	Copper Alloy Type	Average Grain Diameter (μm)	Machinability				Tensile Strength (N/mm ²)	Yield Strength (N/mm ²)	Elongation (%)	Fatigue Strength (N/mm ²)
			Cutting type	Cutting main stress (N)	80m/ min	160m/ min				
71	C	30					488	235	34	
72	C	20					528	289	32	
73	C	22					523	285	33	
74	D	30					514	240	34	
75	D	20					516	254	36	
76	D	80					522	235	26	
77	D	15								
78	D	20								
79	E	25					520	256	33	
80	E	25	⊙	109	116		518	248	28	
81	E	25	⊙	107	113					
82	E	25								
83	E	30	○	△						
84	E	50								
85	E	30	⊙	○						
86	E	65								
87	E	55								
88	E	20	⊙	○						
89	E	30	⊙	116	124		598	276	26	272
90	E	30	⊙	117	126					
91	F	50					477	245	27	
92	G	15					536	284	38	

5. Kindly replace Table 17 on page 73 with the following new Table 17 as follows:

[Table 17]

Copper Alloy		Average Grain Diameter (μm)	Machinability				Tensile Strength (N/mm ²)	Yield Strength (N/mm ²)	Elongation (%)	Fatigue Strength (N/mm ²)
No.	Type		Cutting type	80m/ min	160m/ min	Cutting main stress (N)				
201	A1	1500					435	170	36	156
202	A1	600	⊙	Δ			433	174	34	254
203	A1	220					440	188	32	176
204	A1	350	⊙	Δ						
205	A1	100	x	xx		175	203			
206	A1	400	□	x		130	152			
207	A1	600	□	x		122	142			
208	A1	600	x	xx		173	201			
209	A1	300	xx	xx		179	212			
210	A1	400								
211	A1	1200								
212	A1	200	Δ	xx		135	178			
213	A1	250	xx	xx		205	226			
214	A1	500								
215	A1	1000	●	⊙		99	110	296	95	25
216	A1	1200	⊙	○		110	121	282	94	21
217	B1	450	Δ	Δ		128	147	650	558	15
218	B1	350	○	Δ		126	142	684	572	6
219	C1	300								
220	C1	1000								
221	C1	20								
222	C1	600						418	184	23
223	C1	500					394	178	25	

Comparative Example

